

## REMARKS

Claims 1-26 are in the application. Claims 7-24 are withdrawn from consideration as being drawn to a non-elected invention. Claims 1-6 and 25-26 are rejected. By the present amendment the specification and claims 1 and 3 are amended, and claims 2, 4, 5, 25, and 26 are canceled. The amendments add no new matter.

Applicant thanks the Examiner for the telephone conference of October 31, 2003, in which the publication date of the Biomedical Research article by Kusuhara, et al was discussed.

In view of the amendments and following remarks, reconsideration of claims 1, 3, and 6 is respectfully requested.

### Specification

Applicants have amended the specification to indicate that the present application claims benefit to US provisional application no. 60/238,187, now abandoned, as the Patent Office requested.

### Claim Objections

Claims 25 and 26 were objected to. Claims 25 and 26 have been canceled rendering the objection moot.

### § 112 Rejections.

Claims 1-5 and 25-26 are rejected under 35 USC § 112, first paragraph, as not being enabled. (See Section 5 of the Office Action.) Claims 2, 4, 5, 25, and 26 have been canceled rendering the rejection of these claims moot. Claim 1 has been amended to recite that the claimed polynucleotide is of a particular length and has a specific nucleotide sequence or the complete complement thereof. Claim 3 has been amended to recite that the claimed polynucleotide is of a particular length and encodes a protein having a specific sequence. As applicants have fully enabled such polynucleotides, Applicants request that the rejection of claims 1, 3, and 6, which depends from claim 3, be withdrawn.

Claims 1-3, 6, 25 and 26 are rejected under 35 USC. § 112, first paragraph, as not being enabled. (See Section 6 of the Office Action.) Claims 2, 25, and 26 have been canceled rendering the rejection of these claims moot. Claim 1 has been amended to recite that the claimed polynucleotide is of a particular length and has a specific nucleotide sequence or the complete complement thereof. Claim 3 has been amended to recite that the claimed polynucleotide is of a particular length and encodes a protein having a specific sequence. Since one of ordinary skill in the art would appreciate that Applicants were in possession of these polynucleotides at the time the application was filed, Applicants request that the rejection of claims 1, 3, and 6, which depends from claim 3, be withdrawn.

#### §102 Rejections.

Claims 1, 2, and 25 are rejected under 35 U.S.C § 102(b) as being anticipated by Boehringer Mannheim Biochemicals, 1994 Catalog, p. 93 (hereinafter the "Boehringer Catalog"). Claims 2 and 25 have been canceled rendering the rejection of these claims moot. The Boehringer Catalog does not disclose an isolated polynucleotide which is 1080 nucleotides in length and comprises the nucleic acid sequence set forth in SEQ ID NO:1 or the complete complement thereof, as recited in claim 1, as amended. Lacking such a disclosure, the Boehringer Catalog does not anticipate amended claim 1.

Claims 1 and 2 are rejected under 35 USC §102(e) as being anticipated by US20030057623 (hereinafter "Application '623"). Claim 2 has been canceled rendering the rejection of this claim moot. Application '623 does not disclose an isolated polynucleotide which is 1080 nucleotides in length and comprises the nucleic acid sequence set forth in SEQ ID NO:1 or the complete complement thereof, as recited in claim 1, as amended. Lacking such a disclosure, Application '623 does not anticipate amended claim 1.

Claims 1-5 are rejected under 35 USC §102(b) as being anticipated by WO9842739. In support of the rejection, the Patent Office has sent Applicants the first page of the application and a sequence alignment (Result 2) comparing the sequence set forth in SEQ ID NO.1 of the present invention and a partial sequence of a polynucleotide which is disclosed in WO9842739 and alleged to encode a secreted protein. The sequence shown in the alignment (Result 2) is said to be 2199 nucleotides in length. The alignment shown in Result 2 compares nucleotides 1-1080 as set forth in SEQ ID NO. 1 of the present applications with nucleotides 707 through 1786 of

the sequence set forth in WO9842739. Accordingly, WO9842739 does not disclose an isolated polynucleotide which is 1080 nucleotides in length and comprises the nucleic acid sequence set forth in SEQ ID NO:1 or the complete complement thereof, as recited in claim 1, as amended. In addition, WO9842379 does not disclose an isolated polynucleotide which is 1080 nucleotides in length and encodes a full-length protein whose sequence is set forth in SEQ ID NO:2, as recited in claim 3, as amended. Lacking such disclosures, WO9842739 does not anticipate amended claims 1 or 3 of the present application.

Claims 3-5 and 25 are rejected under 35 USC §102(b) as being anticipated by Kusuhara et al (Biomed. Res., 1999, 20:273-379 (hereinafter "Kusuhara et al.") Respectfully, the publication date of Kushuara et al is less than one year prior to the filing date of the provisional application to which the present application claims benefit. Kusuhara et al was accepted for publication on October 7, 1999, which indicates that Kusuhara et al was published less than one year prior to October 5, 2000, the filing date of Applicant's provisional Application Serial No.: 60/238,187. Accordingly, the rejection under 102(b) is improper and should be withdrawn.

In addition, as explained in the attached Rule 1.131 Declaration of Dr. Monica Montano, Dr. Montano and her co-inventor isolated and sequenced the isolated polynucleotide as claimed in amended claims 1 and 3 of the present application prior to October 7, 1999. Accordingly, Kusuhara et al is also not a proper reference under §102(a).

### §103 Rejections

Claim 6 is rejected under 35 U.S.C. §103 as being unpatentable over WO9842739 or Kusuhara et al. in view of US Patent No. 4,889,806 or Sambrook et al.

As explained above Kusuhara et al is not a proper reference under 35 USC 102(b) or 102(a). Thus, any rejection based on Kusuhara et al should be withdrawn.

With respect to WO9842739, the documents provided by the Patent Office, namely the first page of the International Application and the partial sequence shown in sequence search us-09-972-758a-1.result2, do not teach or suggest an isolated polynucleotide which is 1080 nucleotides in length and encodes a full-length protein whose sequence is set forth in SEQ ID NO:2. Neither US Patent No. 4,889,806 nor Sambrook et al. provide the teachings that are absent from WO9842379. Neither of these secondary references teaches or suggests an isolated polynucleotide which is 1080 nucleotides in length and encodes a full-length protein whose

sequence is set forth in SEQ ID NO:2. Accordingly, WO9842359, either alone or combined with US Patent No. 4,889,806 and/or Sambrook et al, does not render claim 6 obvious.

Claims 25 and 26 are rejected under 35 U.S.C. §103 as being unpatentable over Kusuvara et al. in view of US Patent No. 4,889,806. Claims 25 and 26 are hereby canceled, rendering the rejection moot.

In view of the amendments and remarks, Applicants submit that claims 1,3 and 6 are now in condition for allowance. Prompt notification of such allowance is respectfully requested.

Respectfully submitted,

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